WHAT IS CLAIMED IS:

1   1. A method of enabling semantic comparisons of computer readable textual

2   items comprising:

3   generating a rules base as a mechanism for implementing said

4   comparisons, including:

5   (a) defining syntactic rules for associating syntactic categories

6   with individual words within sentence structures;

7   (b) defining grammar rules for determining semantic roles of at

8   least some of said words within said sentence structures; and

9   (c) defining property rules for associating semantic properties

10   with particular said words, at least some of said property rules being based

11   upon adjacencies of said words in said sentence structures;

12   enabling applications of said rules base to each of a plurality of

13   said textual items, wherein applying said rules base to a specific said textual

14   item generates an output representative of said syntactic categories and said

15   semantic roles and properties determined to be associated with words within

16   sentence structures of said specific textual item; and

17   enabling comparison of said output to at least one second

18   output that is representative of syntactic categories and semantic roles and

19   properties determined to be associated with words within sentence structures

20   of another textual item.

1   2. The method of claim 1 wherein applying said rules base to said specific

2   textual item includes assigning syntactic tags to said words within said

3   sentence structures of said specific textual item, said syntactic tags being

4   indicative of said syntactic categories.

1   3. The method of claim 2 wherein generating said rules base further includes

2   defining ambiguity rules specific to resolving syntactic and semantic

3   ambiguities, including ambiguities relating to uses of pronouns.

1   4. The method of claim 3 wherein defining said ambiguity rules includes

2   establishing rules relating to spelling and idiomatic language.

1   5. The method of claim 3 wherein applying said rules base to said specific

2   textual item includes:

3   (a) using said syntactic rules to form a tagged sequence in

4   which said words are individually tagged with designations of associated said

5   syntactic categories;

6   (b) applying said ambiguity rules to said tagged sequence in

7   order to resolve at least some of said ambiguities, thereby providing a

8   resolved tagged sequence;

9   (c) applying said grammar rules to said resolved tagged

10   sequence to determine said semantic roles of said individually tagged words,

11   thereby providing a role-specific resolved tagged sequence; and

12   (d) applying said property rules to said role-specific resolved

13   tagged sequence to associate said properties with said words.

1   6. The method of claim 5 wherein applying said property rules includes

2   associating adjectives with nouns.

1   7. The method of claim 1 wherein defining said syntactic and grammar rules

2   includes establishing rules for identifying nouns within said sentence

3   structures and for classifying at least some of said nouns as being actors or

4   being participants of actions described by said sentence structures.

1   8. The method of claim 1 wherein enabling said applications of said rules

2   base includes generating said outputs as semantic feature structures, each

3   said semantic feature structure being indicative of a meaning of each said

4   sentence structure of said textual item to which said rules base is applied in

5   generating said semantic feature structure.

1   9. The method of claim 8 wherein generating each said semantic feature

2   structure includes identifying actions, actors and participants described in said

3   sentence structures of said textual item from which semantic feature structure

4   was generated.

1   10. The method of claim 9 wherein enabling said comparison includes

2   comparing two said semantic feature structures to determine whether said

3   two exceed a threshold that is representative of a level of similarity.

1   11. The method of claim 1 wherein enabling said comparison includes

2   configuring software to monitor textual items that are received via the global

3   communications network referred to as the Internet.

1   12. The method of claim 11 wherein configuring said software includes

2   enabling monitoring of instant messages incoming via said Internet.

1   13. The method of claim 11 wherein configuring said software includes

2   enabling monitoring of at least one of Web pages and electronic mail.

1   14. A method of monitoring network activity comprising:

2   identifying a document transmitted via a network being

3   monitored;

4   generating a semantic feature structure from said document,

5   including applying predefined rules of syntax to categorize words of said

6   document on a basis of parts of speech and further including applying

7   predefined rules of grammar to associate said categorized words with

8   semantic features of activities described in said document;

9   comparing said semantic feature structure to at least one

10 reference semantic feature structure, including determining similarity between

11 said semantic feature structure and each said reference semantic feature

12 structure for which said comparing is performed; and

13   using determinations of said similarity as a basis for selectively

14 filtering said document.

1   15. The method of claim 14 wherein said selective filtering is implemented to

2   determine whether to enable presentation of said document to a user of said

3   network.

1   16. The method of claim 15 wherein identifying said document is a step of

2   receiving an instant textual message via said network.

1   17. The method of claim 15 wherein identifying said document is a step of

2   receiving one of a Web page and an electronic mail message.

1   18. The method of claim 14 wherein generating said semantic feature

2   structure further includes applying predefined property rules for associating

3   adjectives of a sentence with nouns of said sentences.

1   19. The method of claim 18 wherein generating said semantic feature

2   structure further includes applying predefined ambiguity rules for resolving

3   ambiguities in said sentences, including ambiguities relating to uses of

4   pronouns.

1   20. The method of claim 19 wherein generating said semantic feature

2   structure is a sequence that follows the order of

3   (1) applying said predefined rules of syntax;

4   (2) applying said predefined ambiguity rules;

5   (3) applying said predefined rules of grammar; and

6   (4) applying said predefined property rules.

1 21. Storage of computer readable programming in which said programming

2 comprises:

3 a dictionary of words in which said words are associated with

4 parts of speech;

5 a rules base configured to be cooperative with said dictionary

6 in converting documents to semantic feature structures, said rules base

7 including syntax rules, grammar rules and property rules;

8 a parts-of-speech tagger module configured to access said

9 rules base in applying said syntax rules to sentence structures of each said

10 document so as to assign parts-of-speech tags to words of said sentence

11 structure;

12 a grammar-based module operatively associated with said

13 parts-of-speech module and said rules base to apply said grammar rules

14 following assignments of said parts-of-speech tags, said grammar-based

15 module being configured to identify said words of said sentence structures

16 of said document with semantic features of activities described in said

17 sentence structures; and

18 a property-based module operatively associated with said

19 grammar-based module and said rules base to apply said property rules to

20 following applications of said grammar rules, said property-based module

21 being configured to assign semantic properties to at least some of said words,

22 wherein at least some assignments of semantic properties are based on

23 adjacencies of particular said words in said sentence structures.

1 22. The storage of claim 21 wherein said rules base further includes

2 ambiguity rules that are specific to resolving ambiguities in said sentence

3 structures, including ambiguities relating to use of pronouns.

1 23. The storage of claim 21 wherein said dictionary includes a thesaurus for

2 identifying synonyms.

1   24. The storage of claim 21 wherein said computer readable programming

2   further comprises a comparison module configured to receive a semantic

3   feature structure that is output from said property-based module and to

4   compare said semantic feature structure to at least one reference structure so

5   as to determine similarity.

1   25. The storage of claim 24 wherein said comparison module is configured to

2   generate outputs indicative of similarities.

1   26. The storage of claim 25 wherein said computer readable programming

2   further comprises a filter module coupled to said comparison module to block

3   subsequent processing of documents upon detection that semantic feature

4   structures generated as a consequence of said documents exceed a

5   threshold of similarity with respect to one of said reference structures.

1   27. The storage of claim 26 wherein said comparison module is enabled to

2   prevent presentation of said documents to at least one user of a network

3   within which said documents are transmitted.

1   28. The storage of claim 27 wherein said computer readable programming is

2   configured to monitor instant textual messages, said documents including said

3   instant textual messages.

1   29. The storage of claim 27 wherein said computer readable programming is

2   configured to monitor at least one of Web pages and electronic mail.